GEOGRAPHIC SCHOOL BULLETINS

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Note to Teachers: Because of the Easter recess, there will be no GEOGRAPHIC SCHOOL BULLETINS on April 6. The BULLETINS will be resumed on Monday, April 13.

Richard Archbold

WITH BOWS AND ARROWS, TRIBESMEN OF INVADED NEW GUINEA FACE WEAPONS THE STONE AGE NEVER KNEW

Stone Age weapons and tools are the only equipment of many of the island's tribes, such as these Papuan warriors with bows and arrows and adzes, the latter made of a sharpened stone lashed to a wooden handle. The bushy-haired Papuans, whose name survives in the southeast corner of New Guinea, ornament themselves with scars, bracelets, feather headdresses, and necklaces of shells and teeth. The tribesman at the left wears a fishnet hairnet and a nose ornament made of a boar's tusk. The two natives were photographed staring at the first white men and first airplanes they had seen (Bulletin No. 1).

HOW TEACHERS MAY OBTAIN THE BULLETINS

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General Headquarters, Washington, D. C.

Gold and Savages on New Guinea, World's Second Largest Island

JAPANESE forces paid dearly for their landings on New Guinea, knowing that conquest of this southwest Pacific spot would give them possession of the world's second largest island and a base within 100 miles of Australia.

New Guinea, next in size after the world's largest island of Greenland, has an area variously estimated from less than 250,000 square miles to over 300,000. The western half is part of the Netherlands Indies; the eastern portion, subdivided into two sections, comes under Australian rule as Northeast New Guinea Territory and Papua.

Men of the Stone Age Inhabit the Mountains

Prior to the first World War, Northeast New Guinea (then known as Kaiser Wilhelm's Land) was a German colony. Occupied by Australian forces in 1914, it was mandated to Australia in post war settlements, together with the neighboring islands of the Bismarck Archipelago and part of the Solomon group. Papua, once a British Crown possession, was turned over to the Australian government in 1906, and its name was changed from British New Guinea to the Territory of Papua.

New Guinea has been called the last stand of Stone Age man. Although scientists and fortune seekers have worn paths through some of its mountains and jungle fastnesses, and modern explorers have charted vast untraveled regions from the air, much of the island's interior remains the haunt of primitive tribes equipped only with stone implements and dominated by savage superstitions (illustration, inside cover). There head-hunting and cannibalism still persist, though wiped out in more accessible areas under the white man's laws.

New Guinea has an estimated million native inhabitants, ranging in size from pygmies to near-giants; in color, from deep tan to black. Most familiar is the Negroid "Papuan" type (illustration, cover).

Some nomadic tribes live a day-to-day existence almost as simple as that of wild animals. Houses of the more advanced Papuans may be built high above the ground on piles, or in trees. Grass-thatched tree houses, of woven sticks and branches, are reached by ladders pulled up at night to keep out marauders.

Haunted by Bandicoots and Birds of Paradise

Before the outbreak of war in the Pacific, the whites in New Guinea numbered between six and seven thousand, including planters, miners, traders, and missionaries. In the Netherlands section there were only a few hundred, but more than 4,000 were found in Northeast New Guinea and nearly 2,000 in Papua.

Lying close to the Equator, the island is considered particularly unhealthful for outsiders used to moderate climates. Malaria and other tropical diseases are common. Hot and humid in the lowlands, it is infested with numerous insects, snakes, and other pests, from its marshy, coastal plains to the mountainous interior where peaks rise more than 15,000 feet.

The discovery of gold in the 1920's was followed by an influx of miners. The chief operating gold fields were some 40 miles inland from the east central coast, where Japanese forces gained their first footholds on the island. Because of difficulties of jungle and mountain trails, regular airplane service was inaugurated in 1927, with coastal airfields at Salamaua and Lae. Tons of equipment and

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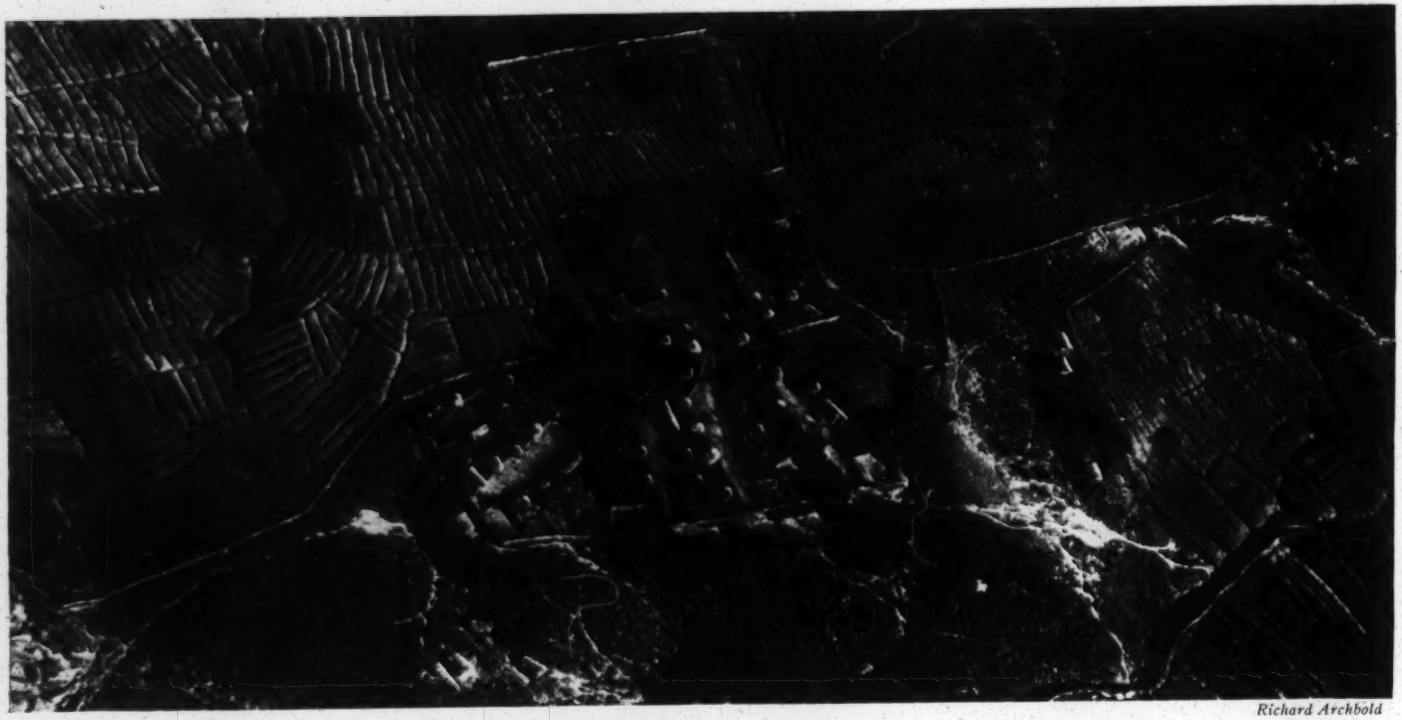

Richard Archbold

WITHOUT METAL PLOW OR HOE, NEW GUINEA'S STONE AGE MEN HAVE "QUILTED" THEIR VALLEY WITH GARDEN PATCHES

A sharp stick for a plow and a stone adz were the implements with which the tribesmen of Grand Valley, near the center of the world's second largest island, created the fertile gardens surrounding their little walled village of thatched huts. Yams, rice, corn, sugar cane, bananas, breadfruit, and the sago palm supply their chief foods. The native menu is varied from time to time with spinach, cucumbers, taro, and beans, and some of the gardens grow tobacco. Supplies, however, are not over-abundant, even for local use, and travelers in the remoter sections are warned not to purchase selfishly in too great quantities from a single settlement. Some tribes have been described as childishly selling food to expeditions, finding themselves hungry, and then asking for its return. The quilted appearance of the land is due to numerous drainage ditches and garden walls (Bulletin No. 1).

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Free French Raid Date-Rich Fezzan, Libian "Back Yard"

ISOLATED brown-walled desert forts in the north Sahara recently have been echoing to gunfire and shouted commands in the best *Beau Geste* tradition, as Free French forces attacked Italian strongholds in the Fezzan region, deep in the heart of Libia.

To achieve their motorized long-distance foray, the Free French struck northward across 1,000 miles of desolate Sahara from the Lake Chad region of French Equatorial Africa.

Dates Travel Good Roads to Mediterranean

Fezzan is a loosely defined military division of south Libia, lying roughly 400 miles inland from the Mediterranean, adjoining the southern border of Tripolitania, stubbornly held Axis foothold in North Africa. High-quality dates, the region's only important export, are freighted northward over good motor roads to the Mediterranean coast at Tripoli and Misurata.

An inhospitable frontier land streaked with the green of oases, the thinly peopled Fezzan extends from the Black Mountains and the desert of El Homra in the north to the Tibesti foothills and the Plateau of Mangueni in the south. In the east it reaches the Cufra watershed; in the west, Algeria. This area measures roughly 500 miles from east to west and 400 miles from north to south, surpassing Montana in size by one-third.

Almost all the people and developed centers of Fezzan, however, are found in the three east-west wadis (dry valleys or depressions) of Sciati, Scerghi, and Bergiusc, which are served by a westward-reaching, claw-shaped system of roads.

This narrow populated area of Fezzan is hemmed in on north and south by vast expanses of sandy desert, and east and west by rocky highlands. The surrounding ridge and plateau summits reach an elevation of 2,000 feet or more, while the wadi floors sink to 600-1,000 feet above sea level. Erosion by wind, sun, and rain has carved some of the wadi walls into castlelike buttresses and towers.

People Pray for No Rain

The 32,500 people of Fezzan are of mixed Arab, Tuareg, Tebu, Bornu, Sudanese, and Berber blood. Two-thirds of them are oasis farmers. The rest are merchants, traders, and breeders of sheep, goats, and camels (illustration, next page). Some of the animal breeders are nomads.

Fezzani men wear the loose white sheetlike burnoose, with turban, fez, or sand-proof Tuareg shawl-muffler. Women also wrap themselves in a voluminous white garment. They wear sandals of palm leaf, and load arms and legs with heavy metal rings. Music and dancing are a big part of life to the gay Fezzani.

The Fezzan climate has severe ups and downs: the temperature in summer reaches 110°-120° Fahrenheit, in the shade, while the before-sunrise midwinter average is about 40°. Freezing weather with snow occasionally strikes the higher plateau areas. Fezzan skies are monotonously blue. People are so poorly prepared for wet weather that some tribes pray to be spared from rain—and with good reason. Violent thundershowers sometimes flood the lowlands, destroying or severely damaging the mud-walled native houses, and drowning people and livestock.

Today dates are virtually the only money crop of Fezzan. The numerous

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other supplies were flown to the gold-mining areas and millions of dollars' worth of the precious metal was taken out. The two ports became boom towns. Each in turn has served as capital of Northeast New Guinea, whose former capital at Rabaul, on the neighboring island of New Britain, had been abandoned because of volcanic eruptions.

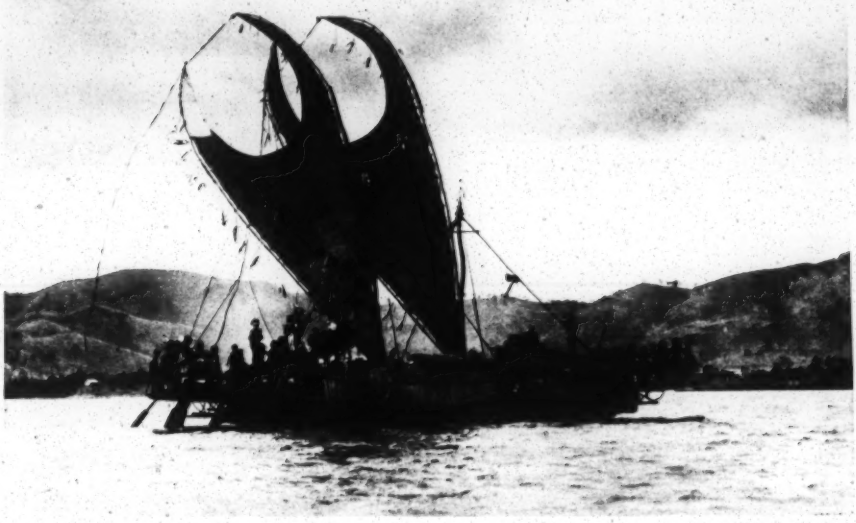
Petroleum has been an increasingly important lure in drawing men to New Guinea. It has been estimated that in Netherlands New Guinea two fields alone were capable of producing 5,000 barrels a day. Potentially useful is the big island's wealth in timber stands, coal, copper, and silver deposits. Rubber, coffee, sisal, and copra have long been important in the island's economy.

Peacetime New Guinea was a laboratory for scientific research in curious forms of animal life. Some, like the pouch-carrying marsupials and egg-laying mammals, are allied to Australia's kangaroo and platypus. The island's natural life ranges from darting, brilliantly marked butterflies to clumsy and blubbery dugongs, or "sea cows"; from fruit-eating bats to wallabies, dingoes, bandicoots, and a "tree-climbing alligator" (a giant lizard). Rare orchids grow in hundreds of varieties. New Guinea is famous for its variety of bird life, especially the beautiful bird of paradise, whose export has been forbidden.

Note: New Guinea may be located on the National Geographic Society's new Map of the Theater of War in the Pacific. A price list for this and other wall maps may be obtained from the Society's headquarters in Washington, D. C.

For further information on New Guinea, see the following articles in the *National Geographic Magazine*: "Unknown New Guinea," March, 1941; and "Into Primeval Papua by Seaplane," September, 1929. Also the following GEOGRAPHIC SCHOOL BULLETINS: "Australia Would Continue as New Guinea Guardian," November 7, 1938; and "New Guinea: Divided Three Ways," March 22, 1937.

Bulletin No. 1, March 30, 1942.



Diana Gooch

THE NEW GUINEA LALATOI PROVES THAT TWO CANOES ARE BETTER THAN ONE

By lashing together two of their dugout outrigger canoes, natives make a two-ply craft called a *lalatoi*, that can safely venture across the Gulf of Papua. They go on such long journeys that they have developed a system of navigating by the stars. The sails, of the crab-claw shape that Papuan stamps have made almost symbolic of New Guinea, are formed of mats of plaited leaves. Clay pots, copra, sago-palm flour, and other primitive provisions are the wares the tribesmen carry to market and exchange for their necessities.

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Rangoon to Canberra: Capitals Seized or Threatened

RANGOON, BURMA—Capital and largest city of Burma, it also is its leading port and commercial center, as well as a Buddhist mecca. Ironically, the name comes from words meaning "End of War" (illustration, next page).

When the British took possession in 1852, Rangoon was an insignificant but ancient fishing village and pilgrims' shrine. As a seaport, it surpassed all neighbors except Colombo, Calcutta, and Bombay. Situated 21 miles up the palm-fringed Rangoon River from the sea, it is within easy reach by canal of the Irrawaddy River, down which traveled for export Burma's wealth of teak, rice, and minerals. For decades Rangoon has had the largest rice-handling plants in the world. Great elevators loaded the grain by suction pumps into ships.

From Rangoon runs the railroad to Lashio, where war goods for China were transferred to Burma Road trucks.

Religious significance is attached to Rangoon because of the towering gold-tipped Shwe Dagon Pagoda, one of the most famous Buddhist temples in Asia.

BANDOENG, JAVA—Surrounded by volcanoes, Bandoeng stands high in the mountainous heart of western Java, 60 airline miles southeast of Batavia. The Netherlands Indies government fled there from Batavia, and it was headquarters of the Allied Command.

Bandoeng's factories in times of peace made airplanes, ammunition, and field guns, as well as grenades, bombs, and precision instruments. Its government-owned quinine factory turned out quantities of this life-saving medicine.

Toward the end of the past century a new railroad brought the first boom to Bandoeng, then little more than a village. By 1930 it had nearly 170,000 inhabitants. Before the war, some 20,000 of its people were Europeans. Bandoeng had the most powerful radio station of the Far East.

DILI, PORTUGUESE TIMOR—About 3,500 of the half-million inhabitants of the northeastern half of the island of Timor live in Dili, capital and chief port. Dili, situated on a coastal plain at the foot of mountains, and sheltered behind high trees, is almost invisible to ships coming down from the north. From the east, its lighthouse, church spire, radio station, and rooftops are landmarks for vessels bringing salt, soap, and cloth.

The Portuguese Governor and a few Europeans live along the coast near Dili or on the neighboring hills, which are more healthful than the village. Fever is prevalent except during the southeast monsoon season, when the climate is dry and pleasant. The business is mostly in the hands of the Chinese. Dili's exports are sandalwood, wax and copra. Most of the inhabitants are Papuans, related to the natives of New Guinea.

About halfway between Java and New Guinea, Dili was chosen last year by the Japanese as terminus of an airline from the Palau Islands and Japan.

PORT MORESBY, PAPUA—A true "village" capital is Port Moresby, administrative center for New Guinea's southeastern section known now as the Territory of Papua. It has fewer than 500 white inhabitants in its European settlement, which is flanked by two native villages. Some of the natives' thatched huts rise from the water on stilts.

Hospitals, police barracks, and radio station, church, school, and the Government House are the chief features of this tropical town, and the two-story "country

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oases support a million date palms, each of which produces about 50 pounds of dates a year. In irrigated gardens grow pomegranate, almond, olive, fig, apricot, and apple trees, as well as melons, beans, and tomatoes. Four harvests of grain—wheat, barley, and durra—can be obtained yearly, but the total quantities are small. Arab farmers also raise a little tobacco, cotton, and indigo.

Raised earth dikes separate the small rectangular plots of the irrigated gardens. The sections are flooded in rotation, one day at a time, so that each patch averages one day a week under water. From wells 12 to 50 feet deep men or animals raise the water in leather buckets, which spill directly into the irrigation channels.

One of the marshy, lakelike basins of Fezzan is called the "Sea of Worms," from the tiny golden-hued shrimps which inhabit it. These are captured in nets, mixed with dates into a paste, and considered a great delicacy.

Sebha Serves as Capital for the District

Each village (such as Múrzuch, Zuila, and Brach) is a cluster of one-story mud huts, relieved by white patches of modern public buildings, and generally with an old mosque, a market place, and an earth citadel or fort. The capital and largest town of Fezzan is Sebha.

But colonial development and the needs of war have brought civilization in new forms—in gasoline depots, radio stations, airplane landing fields and hangars.

Notes: Fezzan is shown on the National Geographic Society's Map of Africa. A price list of maps may be obtained from the Society's headquarters in Washington, D. C.

For further information on Fezzan see the following article in the *National Geographic Magazine*, August, 1925: "Tripolitania, Where Rome Resumes Sway"; and the following GEOGRAPHIC SCHOOL BULLETINS: "Chad, French Lakeside Colony of the Congo," March 24, 1941; "France's African Mandates Formerly German Colonies," January 18, 1937.

Bulletin No. 2, March 30, 1942.

Gordon Casserly

THE CAMEL STILL LOOKS SMUG ABOUT HIS JOB IN FEZZAN

In earlier days, the oases of Fezzan were way stations on the important caravan routes from interior Africa, whose trade made ancient Tripolis rich and powerful. Since the development of modern transport systems in central Africa, the old camel routes across the Sahara have borne comparatively little trade, and motor vehicles have appeared. But the camel still carries the burden of local traffic from desert town to town. Each oasis has its large *fonduk*, or walled space where caravans are accommodated.

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Virgin Islands Face Second War under U. S. Flag

SINCE enemy submarines shelled the oil island of Aruba in the Caribbean, preparedness rather than jubilation is the watchword now in the Virgin Islands on their "Silver Wedding" commemoration of union with the U. S. Blackouts and alerts, with air raid drills in the schools, are familiar procedure on St. Thomas, St. Croix, and St. John, as these Caribbean islands observe the 25th anniversary of their becoming United States possessions on March 31, 1917.

This island group, an Atlantic outpost, is more than ever important in the war of all oceans and both hemispheres. It became U. S. territory in 1917 as a defense measure, after being in Danish possession almost continuously from 1666. Then it was generally designated as the Danish West Indies, although it had been named the Virgin Islands by Columbus, when discovered in 1493.

Almost Bought after Civil War

In addition to St. Croix (the largest), St. Thomas, and St. John, the group includes some 50 uninhabited islets. Together they aggregate only 133 square miles in area. The total population in 1940 was 24,889.

Seventy-five years ago President Johnson, Lincoln's successor, signed a treaty with Denmark covering the purchase of two of the largest islands. Under Western Hemisphere defense plans of 1867, the islands were to have become the first U. S. Naval Station in the Atlantic. In his message to Congress, December 3, President Johnson said: "With the possession of such a station by the United States, neither we nor any other American nation need longer apprehend injury or offense from any transatlantic enemy." But the Senate stopped the transaction.

Normally the Virgin Islands constitute the easternmost U. S. outpost. They guard the Anegada Passage to the Caribbean Sea, and are an important link in the Atlantic defenses of the Panama Canal. In 1940, however, the United States defense lines moved eastward to Atlantic and Caribbean bases leased from Britain.

St. Thomas's harbor at Charlotte Amalie, capital of the U. S. Virgin Islands, offers safe anchorage for a fleet. It is on the direct route between Europe and the Panama Canal, 1,029 miles from Colón, and some 3,600 miles from Liverpool.

Tourists as Numerous as Inhabitants

For many years transatlantic sail eagerly sought St. Thomas for fresh meat after a long crossing. Steam and refrigeration dealt a blow to the port and to the cattle industry. St. Thomas then became an important coaling station and, later, a distributing center for the commerce of all the Lesser Antilles. Shipping has always been the principal business of the islanders of St. Thomas.

Shortly after the U. S. acquired the islands prohibition closed the rum distilleries. In 1930 a foreign corporation controlling 75 per cent of sugar production failed. Two years later half the population was on relief. St. Croix was forced to mortgage many of its public buildings. With the encouragement of the U. S. Government, however, St. Croix and St. Thomas enjoyed a steadily increasing tourist business before the war, over 25,000 passengers arriving by ship and plane during the fiscal year 1938-39.

The building boom incident to U. S. defense put to work every employable male on the islands of St. Thomas and St. Croix. The War Department sponsored extensive road projects, mostly in the vicinity of the marine air base of

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store" is one of the tallest buildings. So few roads are good enough for motor traffic that the town store presents a picture of pioneer days, with black natives outside holding saddled horses of shopping planters.

A railroad connects Port Moresby with copper mines inland, but mining was abandoned in 1927 because of low prices. The harbor is visited only once or twice a month by steamers. Reefs surrounding the entrance are outliers of Australia's Great Barrier Reef.

CANBERRA, AUSTRALIA—The Japanese march southward brings the greatest crisis in Canberra's brief history. In 1908, some 900 square miles of sheep range were set aside in New South Wales as Australia's Federal Territory, but Canberra Parliament House was not opened until 1927. In the most thickly populated corner of the continent, Canberra stands about 300 miles from Melbourne and half as far from Sydney, both cities of more than a million.

This is the only city which serves as official capital of an entire continent. Yet Canberra has but 10,500 inhabitants, one-sixtieth as many as Washington, D. C.

The Australian capital resembles Washington in that it was set up in a federal district, made to order in a rural setting. It was laid out by a Chicago architect, and planned with streets radiating wheel-spoke style from circles. The low, spacious Parliament House covers several acres, surrounded by landscaped lawns. Before it stands a marble monument to the late King George V.

Bulletin No. 3, March 30, 1942.

Frank Outram

THOUGH NO LONGER RULED FROM INDIA, RANGOON SHOWS INDIA'S INFLUENCE

Unlike the narrow crooked lanes of old Oriental cities, Rangoon's streets are broad, paved, regularly laid out and bordered by trees and many European-style buildings. Growing to its present eminence while Burma was India's largest province, the city retained countless signs of India's sway when it became capital of the newly set up Crown Colony in 1937. Most of the merchants are Indians. Shop signs are in English, such as the banner advertising cotton by the yard (upper left). Under the English, the words are repeated in Burmese. The rounded letters of Burma's alphabet developed when all writing was done on palm leaves. They had to be circular, because a straight line looked like only a slit.

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War Takes Nickel out of "Nickel," Pinches Pennies

AT THE same time that Uncle Sam is spending dollars by the billions to carry on a war, he is pinching his pennies and nickels in the same cause. He is pinching them so hard that all the tin and nickel are being squeezed out of them, and some of the copper.

In this way he is saving quantities of those metals to put into war supplies. Nickels cannot buy off the enemy, but nickel in steel helps hold him off. Congress, with this in mind, has this month passed a law "mining" all the nickel out of nickels.

Is "Wooden Nickel" of Jokesters in Offing?

The war is now drafting most of the metals. As war calls increasingly for copper, zinc, nickel, and tin, they may disappear from coins. If other metals to replace them are not available, small coins may disappear for the duration. The "wooden nickel" of vaudeville jokesters may not be far in the offing.

Juggling the metal content of coins has been an old American custom since Massachusetts' pioneer mint in 1652 began making silver sixpences. George Washington in 1796 shaved down the weight of copper in the penny and halfpenny.

In the present crisis, the penny has already given up an ingredient usually unrecognized in it by saver and spender alike—tin. A cent, according to law, must contain 95% copper and 5% zinc and tin. In practice for years 4% zinc and 1% tin have been used. By replacing all but a trace of the tin with additional zinc, 100,000 pounds of tin are being saved for war uses this year alone, and no change in the law is needed.

Pennies are minted in larger numbers than any other coin, three times as many pennies (more than a billion) as nickels in 1941. Ancestors of the Lincoln "copper" would hardly recognize the current alloyed one-cent piece, really bronze instead of copper. The 1792 penny was copper; its successor was a one-cent nickel piece (discontinued during the Civil War).

Silver "Nickels" Not New

The five-cent piece now about to have its nickel amputated, whether the old Indian-head-and-buffalo disk or the newer Thomas Jefferson issue, represents the oldest U.S.-minted coin, the half-dime. The first money made in the first mint of the young United States was a batch of half-dimes concocted of melted-down table silver from Mount Vernon, and solemnly handed over to Martha Washington fresh from the molds. Silver "nickels," along with silver threepences, served several generations of young Americans. Today's "half-dime" of alloyed nickel is a war baby, dating from Civil War times.

In the present change of the nickel's ingredients, another major shift of metals is being made, and the law has had to be changed to allow it. The current nickel coin is legally three-fourths copper and one-fourth nickel. The new "nickel" is to be one-half copper and one-half silver (with the substitution of a small frac-

This bulletin supplies pertinent information for use in developing Unit IV (Section II, A, 2. Restricted use of Materials Needed for War), in the Office of Education handbook, "What the War Means to Us." A limited number of copies of this Bulletin can be supplied.

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Crown Mountain, on St. Thomas, and the huge Mannings Bay air base on St. Croix. The first offshore marine aviation base of the U. S. was built on the island of St. Thomas, near the Naval Station. Building materials, food, and other defense imports have boomed shipping to St. Thomas, whose sea traffic has always been the island's chief economic asset. A total of 1,220 ocean-going ships called at Charlotte Amalie during the fiscal year 1940-41, a record number.

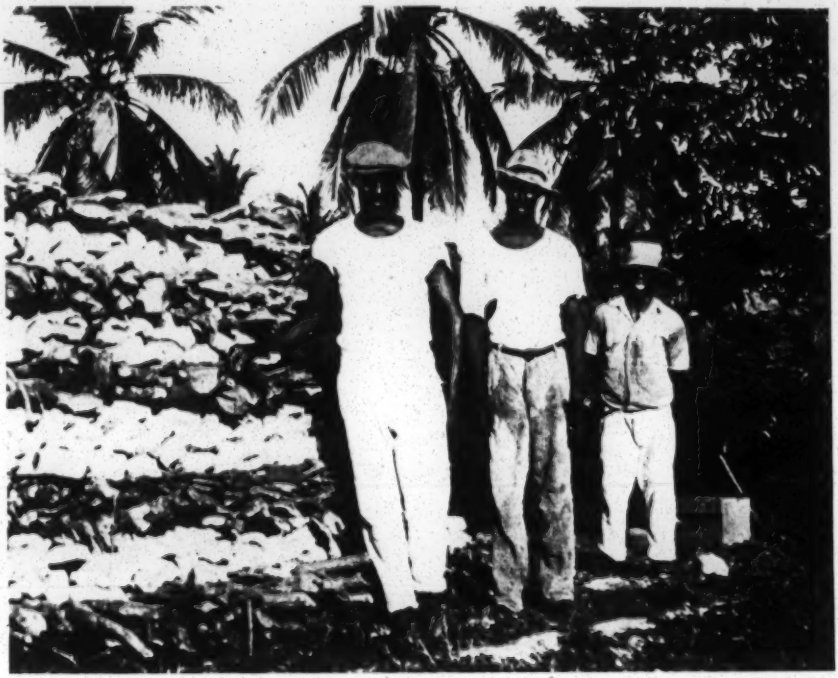
St. Croix, largest, wealthiest, and most densely populated of the islands, has an area of 82 square miles, and lies about 40 miles southeast of St. Thomas. Most of its inhabitants live in Frederiksted, or in Christiansted, former seat of the Danish colonial government. It was in Christiansted that Alexander Hamilton became manager of a warehouse at the age of 14. Being more suited to agriculture than the other islands, St. Croix raises most of the sugar cane of the islands.

The least of the major islands, St. John was little affected by the change from Danish dominion to U. S. citizenship. St. John's harbor at Coral Bay supports no town, the island's population of 722 being scattered in rural communities. The principal industry is brewing bay leaves for the essential oil from which St. Thomas, four miles to the west, has long produced the world's finest bay rum.

Note: The Virgin Islands may be located on the National Geographic Society's Map of Mexico, Central America, and the West Indies.

For further information on the Virgin Islands, see "The American Virgins," *National Geographic Magazine*, September, 1940.

Bulletin No. 4, March 30, 1942.



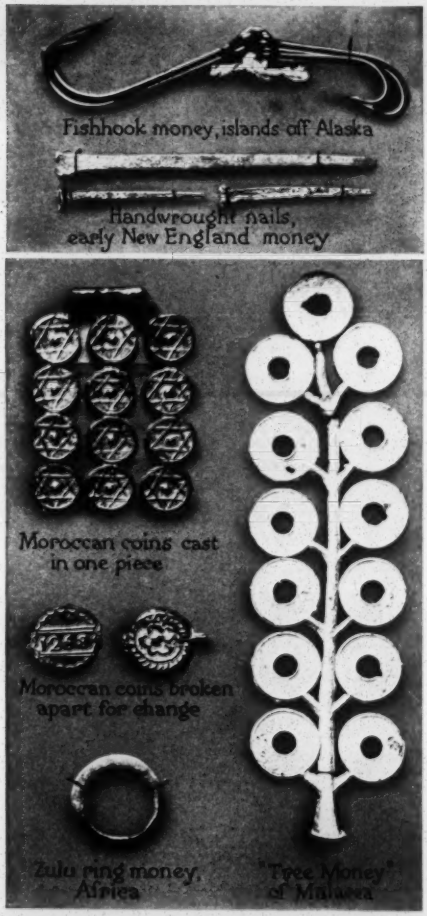
Henry Howard

CRUZ BAY'S PALM-SHADED LIME KILN AIDS LOCAL BUILDERS

Life on St. John, in the Virgin Islands, is still more or less simple and primitive, as well as picturesque. Under the palm trees that fringe the crescent of sandy beach at Cruz Bay, the villagers live in cabins. These islanders are a self-sufficient lot, fishing, growing vegetables and fruit, and even building their own lime kilns in the shade of the palms. Alternate layers of wood and limestone are piled up and fired from the bottom. When cool, the lime is of excellent quality. Because of its hardening by change to calcium carbonate, and its comparative cheapness, lime is one of the most important of building materials, and its sale to St. Thomas builders is a source of income when fish fail to bite.

tion of other metals if desirable), thus returning halfway to the silver half-dimes that Washington, Jefferson, and Benjamin Franklin spent.

The three U. S. mints in 1941 produced 300,000,000 nickels, weighing 1,740 tons. With the shift of ingredients, 870 tons of silver will replace 435 tons of nickel and 435 tons of copper in the first 300,000 nickel-less "nickels" to be minted. The nickel to be saved—435 tons of it, or 870,000 pounds, equals one-fourth the normal yearly U. S. consumption for civilian uses. In war production it alloys steel in armor-plate, projectiles, and other armament for hardness, strength, and resistance to chemical action.


Fishhook money, islands off Alaska
Handwrought nails, early New England money
Moroccan coins cast in one piece
Moroccan coins broken apart for change
Zulu ring money, Africa
"Tree Money" of Malacca

Farrau Zerbe

FISHHOOKS AND NAILS HANG ON THE NICKEL'S FAMILY TREE

Before mints were set up in American colonies, the supply of foreign coins in New England was supplemented by handwrought nails. Steps between barter and coinage included the use, as mediums of exchange, of objects useful in themselves; then token objects such as the Zulu ring money; and finally, coins. A "leaf" of the tree money was broken off as needed. The "nickel-less nickel" is one of the newer developments in coin history.

The new five-cent piece, half silver and half copper, will actually contain more silver than the dime, and be of greater intrinsic value. There will be over 38 grains of silver in the "nickel"; there are less than 35 grains in the dime. With coins, as with paper money, the nations of the world trade not on intrinsic value but on confidence in the government which arbitrarily declares the value.

In appearance, the nickel-less "nickel" will differ little from the present coin. It may have a yellowish tinge. It will behave just as well in pay telephones, subway turnstiles, and slot machines. In fact, the main purpose of providing 10% leeway in the "recipe" under the new law is to make sure that the new coin will contain the right metals to work in existing slot machines. Some of these have electric devices for detecting false coins.

As to the silver coins from the dime up, no immediate change is planned. The law fixes them at 90% silver and 10% copper. While silver will be needed as a substitute for tin in war production, the Treasury is rich in it.

Gold doesn't enter the coin problem, for U. S. gold coins are no more. After their recall by the Government in 1933, the eagles, half-eagles, quarter-eagles, and double-eagles have gradually flown away. They were melted down to become part of the Nation's gold reserve in bar form.

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Note: For additional information on money and coinage, see the following articles in the *National Geographic Magazine*: "Pieces of Silver," September, 1933; and "The Geography of Money," December, 1927.

Information on the nickel steels and other high-strength alloys used in war materials, to which our coins are contributing, may be found in "Metal Sinews of Strength," in the April, 1942, issue of the *National Geographic Magazine*.